

IN THE CLAIMS

Please amend the claims as indicated hereinbelow. The status of each of the claims is indicated hereinbelow.

1. (currently amended): In a heat exchanger having a tube with an interior passageway and a wall surrounding said passageway, wherein the improvement comprises a pair of generally opposed dimples projecting from said wall into said passageway, said dimples being in generally facing relationship, but being offset from each other along in a direction parallel to a longitudinal axis of said tube such that only a portion of each dimple is aligned with the other dimple along an axis transverse to said longitudinal axis.

2. (cancelled).

3. (currently amended): The heat exchanger of claim 1 further including a plurality of pairs of dimples projecting from said wall into said passageway at respective selected locations along said tongitudinal axis, the dimples of each pair being in generally facing generally opposed relationship, but being offset from each other along in a direction parallel to said longitudinal axis such that only a portion of each dimple is aligned with the other dimple of a corresponding pair along an axis transverse to said longitudinal axis.

4. (original): The heat exchanger of claim 1 wherein each of said dimples defines a convex surface in said passageway.

5. (currently amended): The heat exchanger of claim 1 wherein at least one dimple projects into said passageway a distance greater than one-half of a minor dimension of said tube, said minor dimension being measured along an said axis transverse to said longitudinal axis.

6. (currently amended): The heat exchanger of claim 1 wherein each of said dimples has a major dimension and a minor dimension, said major dimension being parallel to said longitudinal axis, said dimples being offset from each other along said longitudinal axis by an amount not greater than one-half of said major dimension, a length of each of said dimples along said longitudinal axis.

7. (currently amended): The heat exchanger of claim 1 wherein said dimples project into said passageway a distance greater than one-half of a minor dimension of said tube, said minor dimension being measured along said axis transverse to said longitudinal axis, such that respective portions of said dimples are in contact with each other within said passageway.

8. (currently amended): The heat exchanger of claim 1 wherein said tube is generally U-shaped and has first and second leg portions with a return bend portion intermediate said first and second leg portions, said first leg portion extending between an inlet end of said tube and said return bend portion, said second leg portion extending between said return bend portion and an outlet end of said tube, said dimples being located in said second leg portion.

9. (currently amended): A heat exchanger tube of generally circular cross-section, said tube having an interior passageway, a wall surrounding said passageway and a pair of generally diametrically opposed dimples projecting from said wall into said passageway , said dimples being in generally facing relationship, but being offset from each other along a longitudinal axis length of said tube such that only a portion of each dimple is diametrically aligned with the other dimple.

10. (cancelled).

11. (currently amended): The tube of claim 9 further including a plurality of pairs of dimples projecting from said wall into said passageway at respective selected locations along said longitudinal axis tube, the dimples of each pair being in generally facing generally diametrically opposed relationship, but being offset from each other ~~along~~ said longitudinal axis such that only a portion of each dimple is diametrically aligned with the other dimple of a corresponding pair.

12. (original): The tube of claim 9 wherein each of said dimples defines a convex surface in said passageway.

13. (currently amended): The tube of claim 9 wherein at least one of said dimples projects into said passageway ~~beyond a central longitudinal axis~~ a distance greater than one-half of the diameter of said tube.

14. (currently amended): The tube of claim 9 wherein said dimples are offset from each other ~~along said longitudinal axis~~ by an amount not greater than one-half of a length of each of said dimples ~~along parallel to said a longitudinal axis of said tube~~.

15. (currently amended): The tube of claim 9 wherein said dimples project into said passageway a distance greater than one-half of the diameter of said tube such that respective portions of said dimples are in contact with each other within said passageway.

16. (currently amended): The tube of claim 9 wherein said tube is generally U-shaped and has first and second leg portions and a return bend portion that is intermediate said first and second leg portions, said first leg portion extending between an inlet end of said tube and said return bend portion, said second leg portion extending between said return bend portion and an outlet end of said tube, said dimples being located in said second leg portion.

17. (currently amended): In a furnace having a heat exchanger with at least one generally cylindrical tube adapted to receive products of combustion, said at least one tube having an interior passageway and a wall surrounding said passageway, wherein the improvement comprises a pair of generally diametrically opposed dimples projecting from said wall into said passageway, said dimples being in generally facing relationship, but being offset from each other along a longitudinal axis length of said tube such that only a portion of each dimple is diametrically aligned with the other dimple.

18. (currently amended): The furnace of claim 17 further including a plurality of cooperating pairs of dimples projecting from said at least one wall into said passageway at respective selected locations along said longitudinal axis tube, the dimples of each cooperating pair being in generally facing diametrically opposed relationship, but being offset from each other along said longitudinal axis the length of said tube.

19. (original): The furnace of claim 17 wherein at least one dimple projects into said passageway beyond a central longitudinal axis of said tube.

20. (original): The furnace of claim 19 wherein both of the dimples of said pair project into said passageway beyond said central longitudinal axis.

21. (currently amended): The furnace of claim 17 wherein said dimples are offset from each other along said longitudinal axis by an amount not greater than one-half of a length of each of said dimples along said a longitudinal axis of said tube such that respective portions of said dimples are in contact with one another in said passageway.

22. (cancelled).

23. (new): The heat exchanger of claim 6 wherein said dimples project into said passageway a distance greater than one-half of a minor dimension of said tube, said minor dimension being measured along said axis transverse to said longitudinal axis, such that respective portions of said dimples are in contact with each other within said passageway.

24. (new): The tube of claim 14 wherein said dimples project into said passageway a distance greater than one-half of the diameter of said tube such that respective portions of said dimples are in contact with one another in said passageway

25. (new): The furnace of claim 20 wherein said dimples are offset from each other by an amount not greater than one-half of a length of each of said dimples in a direction parallel to said central longitudinal axis such that respective portions of said dimples are in contact with one another in said passageway.